



Water-Data Report 2008

01022294 EAST BRANCH BEAR BROOK NEAR BEDDINGTON, ME

Maine Coastal Basin
Maine Coastal Subbasin

LOCATION.--Lat 44°51'31", long 68°06'21" referenced to North American Datum of 1983, Hancock County, ME, Hydrologic Unit 01050002, on left bank 600 ft upstream from confluence with the West Branch Bear Brook and 0.7 mi upstream from the mouth of Bear Brook at Bear Pond.

DRAINAGE AREA.--0.042 mi², Furnished by U.S. Environmental Protection Agency.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--

DISCHARGE: March 1988 to current year.

REVISED RECORDS.--WDR ME-89-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and V-notch sharp-crested weir. Datum of gage is 906.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except for flows between 0.14 ft³/s and 0.050 ft³/s, which are fair, for flows below 0.050 ft³/s, periods of ice effect, Dec. 2-18, Dec. 31 to Jan. 6, Jan. 14-15, 21-29, Feb. 10-13, 16-17, Feb. 21 to Mar. 3, periods of doubtful stage-discharge relation, Oct. 13-14, 17-19, Oct. 23-31, May 8-19, June 19-20, July 3-4, July 31, Sept. 14-16, and periods of no gage-height record, May 20, June 23-27, Sept. 17-19, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18.6 ft³/s, Mar. 9, 1998, gage height, 6.91 ft; no flow for many days in 1988-2003, 2005, 2007 and 2008.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2.20 ft³/s and (or) maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|
| Nov 3 | 2330 | 2.66 | 5.82 |
| Feb 18 | 1555 | 3.70 | 5.94 |
| Mar 9 | 0040 | 4.10 | 5.98 |
| Apr 29 | 2040 | 5.71 | 6.12 |
| Sept 7 | 0630 | 3.14 | 5.88 |
| Sept 28 | 0710 | *15.7 | *6.67 |

Minimum discharge, 0.000 ft³/s, Oct. 1-12, July 7-21, and Sept. 6.

01022294 EAST BRANCH BEAR BROOK NEAR BEDDINGTON, ME—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | 0.000 | 0.025 | 0.099 | e0.059 | 0.071 | e0.054 | 0.26 | 0.29 | 0.074 | 0.010 | 0.14 | 0.002 |
| 2 | 0.000 | 0.020 | e0.072 | e0.055 | 0.24 | e0.049 | 0.67 | 0.19 | 0.074 | 0.002 | 0.21 | 0.002 |
| 3 | 0.000 | 0.47 | e0.068 | e0.052 | 0.16 | e0.041 | 0.33 | 0.15 | 0.049 | e0.002 | 0.59 | 0.002 |
| 4 | 0.000 | 1.09 | e0.062 | e0.049 | 0.11 | 0.068 | 0.25 | 0.13 | 0.11 | e0.002 | 0.50 | 0.001 |
| 5 | 0.000 | 0.23 | e0.053 | e0.048 | 0.092 | 0.18 | 0.22 | 0.11 | 0.094 | 0.002 | 0.28 | 0.001 |
| 6 | 0.000 | 0.33 | e0.048 | e0.046 | 0.079 | 0.20 | 0.23 | 0.098 | 0.066 | 0.001 | 0.15 | 0.006 |
| 7 | 0.000 | 0.40 | e0.044 | 0.071 | 0.068 | 0.14 | 0.29 | 0.085 | 0.051 | 0.001 | 0.10 | 1.19 |
| 8 | 0.000 | 0.18 | e0.043 | 0.38 | 0.060 | 0.66 | 0.40 | e0.085 | 0.038 | 0.000 | 0.083 | 0.24 |
| 9 | 0.000 | 0.12 | e0.038 | 1.05 | 0.055 | 1.47 | 0.45 | e0.072 | 0.025 | 0.000 | 0.090 | 0.17 |
| 10 | 0.000 | 0.091 | e0.033 | 0.46 | e0.051 | 0.33 | 0.58 | e0.062 | 0.020 | 0.000 | 0.066 | 0.15 |
| 11 | 0.000 | 0.074 | e0.031 | 0.37 | e0.047 | 0.21 | 0.53 | e0.055 | 0.020 | 0.000 | 0.058 | 0.090 |
| 12 | 0.023 | 0.062 | e0.031 | 0.53 | e0.044 | 0.16 | 0.86 | e0.049 | 0.016 | 0.000 | 0.11 | 0.074 |
| 13 | e0.007 | 0.074 | e0.029 | 0.24 | e0.80 | 0.13 | 0.50 | e0.044 | 0.012 | 0.000 | 0.10 | 0.086 |
| 14 | e0.002 | 0.067 | e0.028 | e0.16 | 0.95 | 0.11 | 0.35 | e0.040 | 0.009 | 0.000 | 0.063 | e0.086 |
| 15 | 0.001 | 0.065 | e0.026 | e0.12 | 0.26 | 0.095 | 0.31 | e0.036 | 0.007 | 0.000 | 0.045 | e0.12 |
| 16 | 0.001 | 0.59 | e0.025 | 0.098 | e0.16 | 0.085 | 0.30 | e0.032 | 0.008 | 0.000 | 0.034 | e0.090 |
| 17 | e0.001 | 0.27 | e0.056 | 0.082 | e0.13 | 0.077 | 0.30 | e0.032 | 0.023 | 0.000 | 0.031 | e0.046 |
| 18 | e0.001 | 0.15 | e0.034 | 0.14 | 1.72 | 0.073 | 0.27 | e0.038 | 0.021 | 0.000 | 0.019 | e0.034 |
| 19 | e0.001 | 0.11 | 0.030 | 0.14 | 1.44 | 0.070 | 0.22 | e0.037 | e0.021 | 0.000 | 0.036 | e0.028 |
| 20 | 0.054 | 0.090 | 0.029 | 0.10 | 0.50 | 0.088 | 0.17 | e0.032 | e0.020 | 0.000 | 0.037 | 0.024 |
| 21 | 0.017 | 0.077 | 0.027 | e0.075 | e0.24 | 0.084 | 0.14 | 0.026 | 0.016 | 0.002 | 0.021 | 0.024 |
| 22 | 0.008 | 0.15 | 0.026 | e0.070 | e0.17 | 0.071 | 0.11 | 0.033 | 0.010 | 0.005 | 0.013 | 0.020 |
| 23 | e0.005 | 0.18 | 0.044 | e0.063 | e0.13 | 0.063 | 0.095 | 0.058 | e0.008 | 0.002 | 0.010 | 0.015 |
| 24 | e0.004 | 0.11 | 0.95 | e0.054 | e0.11 | 0.058 | 0.13 | 0.040 | e0.007 | 0.006 | 0.008 | 0.014 |
| 25 | e0.003 | 0.088 | 0.27 | e0.048 | e0.092 | 0.056 | 0.10 | 0.031 | e0.005 | 0.080 | 0.007 | 0.011 |
| 26 | e0.003 | 0.083 | 0.16 | e0.043 | e0.079 | 0.060 | 0.084 | 0.026 | e0.003 | 0.041 | 0.006 | 0.011 |
| 27 | e0.061 | 0.51 | 0.12 | e0.040 | e0.069 | 0.066 | 0.076 | 0.020 | e0.003 | 0.012 | 0.005 | 0.26 |
| 28 | e0.13 | 0.21 | 0.092 | e0.037 | e0.062 | 0.064 | 0.070 | 0.016 | 0.003 | 0.006 | 0.004 | 5.00 |
| 29 | e0.061 | 0.15 | 0.084 | e0.034 | e0.055 | 0.055 | 1.05 | 0.014 | 0.007 | 0.004 | 0.004 | 0.97 |
| 30 | e0.038 | 0.14 | 0.072 | 0.084 | --- | 0.055 | 0.89 | 0.011 | 0.012 | 0.002 | 0.004 | 0.50 |
| 31 | e0.028 | --- | e0.065 | 0.099 | --- | 0.059 | --- | 0.050 | --- | e0.002 | 0.003 | --- |
| Total | 0.449 | 6.206 | 2.789 | 4.897 | 8.044 | 4.981 | 10.235 | 1.992 | 0.832 | 0.182 | 2.827 | 9.267 |
| Mean | 0.01 | 0.21 | 0.09 | 0.16 | 0.28 | 0.16 | 0.34 | 0.06 | 0.03 | 0.01 | 0.09 | 0.31 |
| Max | 0.13 | 1.09 | 0.95 | 1.05 | 1.72 | 1.47 | 1.05 | 0.29 | 0.11 | 0.080 | 0.59 | 5.00 |
| Min | 0.000 | 0.020 | 0.025 | 0.034 | 0.044 | 0.041 | 0.070 | 0.011 | 0.003 | 0.000 | 0.003 | 0.001 |
| Cfsm | 0.34 | 4.93 | 2.14 | 3.76 | 6.60 | 3.83 | 8.12 | 1.53 | 0.66 | 0.14 | 2.17 | 7.35 |
| In. | 0.40 | 5.50 | 2.47 | 4.34 | 7.12 | 4.41 | 9.07 | 1.76 | 0.74 | 0.16 | 2.50 | 8.21 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2008, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Mean | 0.09 | 0.18 | 0.15 | 0.13 | 0.09 | 0.20 | 0.26 | 0.15 | 0.07 | 0.03 | 0.01 | 0.03 |
| Max | 0.43 | 0.34 | 0.39 | 0.37 | 0.28 | 0.49 | 0.49 | 0.49 | 0.29 | 0.25 | 0.09 | 0.31 |
| (WY) (2006) | (1996) | (1997) | (1996) | (2008) | (1998) | (2005) | (1989) | (2006) | (1996) | (2008) | (2008) | (2008) |
| Min | 0.00 | 0.00 | 0.03 | 0.02 | 0.01 | 0.02 | 0.10 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 |
| (WY) (2002) | (2002) | (1990) | (2001) | (2004) | (2001) | (2006) | (2001) | (1988) | (1991) | (1993) | (1993) | (1993) |

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| | Calendar Year 2007 | Water Year 2008 | Water Years 1988 - 2008 | |
|---------------------------------|---------------------------|------------------------|--------------------------------|--------------|
| Annual total | 35.814 | 52.701 | | |
| Annual mean | 0.10 | 0.14 | 0.12 | |
| Highest annual mean | | | 0.17 | 1996 |
| Lowest annual mean | | | 0.06 | 2001 |
| Highest daily mean | 2.59 Mar 17 | 5.00 Sep 28 | 5.00 | Sep 28, 2008 |
| Lowest daily mean | 0.000 Aug 23 | 0.000 Oct 1 | 0.000 | Jun 14, 1988 |
| Annual seven-day minimum | 0.000 Aug 27 | 0.000 Oct 1 | 0.000 | Jun 14, 1988 |
| Maximum peak flow | | 15.7 Sep 28 | 18.6 | Mar 9, 1998 |
| Maximum peak stage | | 6.67 Sep 28 | 6.91 | Mar 9, 1998 |
| Instantaneous low flow | | 0.000 Oct 1 | 0.000 | Jun 20, 1988 |
| Annual runoff (cfsm) | 2.34 | 3.43 | 2.77 | |
| Annual runoff (inches) | 31.72 | 46.68 | 37.70 | |
| 10 percent exceeds | 0.24 | 0.33 | 0.27 | |
| 50 percent exceeds | 0.030 | 0.059 | 0.046 | |
| 90 percent exceeds | 0.000 | 0.002 | 0.000 | |

